

## ARMY MODERNIZES IN FACE OF SHORTFALL

by

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"There is a tide in the affairs of men which taken at the flood, leads on to fortune; Omitted, all the voyage of their life is bound in shallows and in miseries."

-William Shakespeare



The United States Army Medical Department stands at flood tide. It faces a future which promises both great opportunity and significant challenge.

Skyrocketing health-care costs present the potential to impact health-care service delivery adversely within the AMEDD and

across the Military Health System (MHS). There was a shortfall in health care funding during the development of the Defense Health Program (DHP) Program Objective Memorandum (POM) 02-07. This has brought about increased scrutiny by DoD and the Services and simultaneously has created great momentum for improving military medicine's business practices. The end result will be to achieve the full fruition of the promise of TriCare with improved access, superb quality, and cost control.

Three closely linked key initiatives are prerequisites for the success of military medicine. These three initiatives are full implementation of Force Health Protection (FHP), support of service modernization, and MHS optimization. Successful FHP and optimization will greatly enhance service-modernization programs by preventing rising healthcare costs from fiscally impeding force modernization.

## Force Health Protection

Foremost among the lessons learned by military medicine during the Persian Gulf War and its aftermath is the ever-increasing necessity of FHP. Through integrated preventive and clinical FHP programs designed to support the "total force," the MHS is able to support evolving national military strategies.

Three basic concepts or interrelated pillars define FHP: promoting and sustaining a healthy and fit force; illness and injury prevention; and a world-class casualty care and management system. FHP is the sweeping tide for a fundamental reorientation of military medicine—from a primary focus on casualty care to a more balanced approach that emphasizes proactive preventive services.

Providing a healthy and fit force includes giving the warfighting commander an optimally fit soldier, who is better able to withstand the physical and mental stressors of the future battlefield. Promoting wellness for the soldier and his family with healthy lifestyle behaviors strengthens the human component of the services against disease and injury. Physical-fitness training, health-promotion programs, preventive dentistry, family-support services, occupational-health programs, periodic health assessments, and stress management are all supportive of a healthy and fit force.

Casualty prevention is essential throughout the health life cycle of service members. Control of environmental and occupational health hazards to prevent illness and injury is not only good business practice, but also becomes a force multiplier for the commander on the battlefield. FHP recognizes that sustaining a servicemember's health in the field or at home station produces a far better readiness outcome than providing health care after illness or injury. Casualty prevention is a continuous life-cycle process that includes personnel protection, personnel monitoring, environmental monitoring, health care, and comprehensive medical surveillance.

Personnel protection includes immunizations, personal-protective items such as Nuclear, Biological, and Chemical (NBC) equipment, and the DoD insect-repellent system. It includes providing safe food and water, and the knowledge and skills to deal effectively with the tremendous stress of the modern battlefield. AMEDD research and development efforts will continue to emphasize the importance of personnel protection in the form of vaccines and chemoprophylaxis for infectious disease and NBC threats.

Personnel monitoring includes programs such as the DoD serum repository, pre- and post-deployment screenings, and accurate recordkeeping to document all care provided—either on the battlefield or in a fixed facility. Growing automation of medical systems through such efforts as the computerized patient record, the Personal Information Carrier (PIC), and Medical Communications for Combat Casualty Care (MC4) will dramatically increase our ability to maintain exposure and health-care records.

Environmental monitoring entails knowledge of potential health threats in the air, water, and soil to which our servicemembers are exposed. A variety of sensors is under development for both medical and nonmedical monitoring of the environment that will allow us to understand and predict the exposures of an individual soldier.

Comprehensive Medical Surveillance (CMS) is the companion piece to FHP. CMS develops usable information for decisionmakers. It entails the aggregation of data from all elements of FHP, which can then be used to make informed decisions on future research priorities or countermeasures to protect the force better.

Thanks to the tremendous efforts of the prevention communities of the services' medical departments, most elements of FHP are well in place. However, there is still work to be done. Information systems are key enablers. Monitoring of the environmental threat must be automated through the development of DOEHRS (Defense Occupational and Environmental Health Readiness System).

Additionally, several health threats described by our medical-surveillance efforts remain to be solved. Among those threats are injuries, alcohol abuse, and tobacco use, which we know to be leading health risks for our personnel. The DoD Prevention, Safety, and Health Promotion Council (PSHPC) is chartered with the mission of providing concepts for mitigating these problems.

The third pillar of FHP, casualty care and management, builds upon the traditional strengths of military medicine. Using new technologies, digitization, and enhanced mobility to achieve lighter, faster, more responsive medical capability will ensure that military medicine is there to support the deployed servicemember. Under FHP, casualty care and management is effected by the four levels of combat care: first response, forward resuscitative surgery, theater hospitalization, and enroute care.

## Support to Service Modernization

Each of the services is working diligently to modernize its force. The Army's process for solving for modernization problems is known by the acronym DTLOMS. It analyzes all modernization issues through the lenses of Doctrine, Training, Leader Development, Organizations, Materiel, and Soldiers, thereby producing focused, cost-conscious outcomes that meet identified requirements to improve capabilities. Although modernization always comes at a cost, materiel solutions traditionally bear the greatest price

tag. Army modernization, and therefore AMEDD modernization, uses the big picture approach to provide the most robust force for the least cost.

Cost-effectiveness is critical in avoiding the unnecessary diversion of military modernization dollars to the DHP.

Gen. Eric Shinseki, chief of staff of the Army, describes America's Army as "Soldiers on Point for the Nation... Persuasive in Peace, Invincible in War." Facing the challenges of this new century, he has begun the process of transforming the Army into a force that is responsive, deployable, agile, versatile, lethal, survivable, and sustainable.

Army Medicine plays a significant role in this transformation process through our Medical Reengineering Initiative (MRI). Where MRI has focused on corps- and theater-level medical systems, we have also worked hard to reshape our support to division units and below. Additional medical support, with a special emphasis on preventive services, has been placed closer to the combat soldier. Staying the course on MRI will facilitate the medic's support to Army modernization, while assuring the best possible FHP to the Army's warfighters.

Our MRI efforts also parallel the Army's Transformation plan. Medics in support enable the soldier to be on point for our nation. In October 2001, soldiers will begin a 16-week training program at the AMEDD Center and School to become more skilled and competent medics in the 21st century. The newly created 91W Military Occupational Specialty (MOS), Health Care Specialist, will merge today's 91B MOS Medical Specialist and 91C MOS Practical Nurse and provide additional skills to meet the operational combat health-support needs of the future battlefield. Training will be focused on emergency care, primary care, medical force protection, and evacuation and retrieval. All medics will graduate with National Registry Emergency Medical Technician (NREMT-B) certification.

Medical evacuation of wounded and injured soldiers from the battlefield has been the AMEDD's number-one priority for modernization for several years. Clearing the battlespace enables the combat commander to concentrate on the warfight. Air evacuation is now the preferred method, and the AMEDD has been working with the aviation community to improve the Blackhawk and create a state-of-the-art evacuation platform—the UH-60Q.

Automation of patient tracking through the Transportation Command Regulating and Command and Control Evacuation System (TRAC²ES) is essential to improve medical care of our military personnel in both peacetime and in war. TRAC²ES will permit casualty tracking throughout the battlefield and provide in-transit visibility of casualties. At the same time, it will facilitate improvements in evacuation accuracy and response time.

Yet another AMEDD modernization effort is exploratory work on the next generation of medical shelter systems. This effort is looking at developing a family of rigid and soft-sided containers that are lightweight and strategically deployable by C-130 airlift. These shelters will be completely autonomous and will be able to support telemedicine requirements better, meet NATO standards, contain embedded environmental control units and power generators, and operate in an NBC environment. The multifunctional design will allow for quick reconfiguration for multiple medical applications.

The AMEDD is working with the Transportation Corps to define medical requirements for the FMTV-LHS—a pneumatic load-handling system (LHS) to be used with

trucks in the Family of Medium Tactical Vehicles (FMTV). This vehicle will be used to transport DEPMEDS shelters, as well as the shelter system of the future. The FMTV-LHS will consist of a truck and trailer with a combined eight-ton capacity.

Another major initiative in support of AMEDD transformation and the Army's digitization efforts is the Joint Theater Medical Information Program (TMIP). The Army implements TMIP through the Medical Communications for Combat Casualty Care (MC4) program. This multi-million-dollar major acquisition program will build and support the infrastructure that will "enable" medics to perform all medical functions on the battlefield.

Implementation of TMIP/MC4 will let us phase out manual and stove-piped legacy systems and replace them with an integrated joint medical-information system. This improves readiness in that health care providers and administrators will be using the same systems in war as they use in peace, reducing training time at deployment.

MC4 also provides situational-awareness information for medical planners to help them tailor medical forces for the theater and increase the span of control of medical units. This will give the AMEDD the ability to synchronize Combat Health Support (CHS) with the warfighter and Combat Service Support (CSS) community. MC4 will also enhance our ability to provide predictive/anticipatory Class VIII to reduce stockpiles in theater. MC4 will also analyze medical threats and assist us with faster processing soldiers for deployment. MC4 integrates TRAC2ES improving patient evacuation and tracking.

## Military Health System Optimization

Controlling the costs of health care across the Military Health System (MHS) will be the sine qua non of Army Medicine's contribution to force modernization. Therefore, the health-care delivery system of the MHS must be optimized in both the theater and sustaining base for maximum efficiency.

Increased efficiency is even more important with the recent passage of the National Defense Authorization Act (NDAA). This statute enhances the healthcare benefit for several of our population segments. All military healthcare beneficiaries—regardless of age—will enjoy greatly enhanced pharmacy benefits beginning 1 April. The expanded pharmacy benefit will include improved access to a wider variety of appropriate and cost-effective medications through the National Mail Order Pharmacy (NMOP) and the TriCare retail pharmacy network with minimal co-pays.

Beneficiaries who utilize military medical treatment facility pharmacies may continue to do so with no out-of-pocket expense. The statute further authorized access to nonnetwork pharmacies with an annual deductible of \$150 and a co-pay of \$9 or 20 percent per prescription, whichever is greater. Effective 1 October, eligible beneficiaries who continue to receive medical care from their current medicare providers will have TriCare as their second payer. TriCare will pay their out-of-pocket costs for services covered under medicare. In addition, they will have access to benefits which may not be covered by medicare. To participate, beneficiaries must be eligible for medicare Part A and enrolled in medicare Part B.

This is a step in the right direction towards keeping faith with our most senior retirees. Co-pays for active-duty family members have also been eliminated. It's the AMEDD's job now to find the best ways to provide these new benefits in a resource-constrained environment.

In 1998 a utilization-management wedge in the POM provided emphasis on MHS reengineering initiatives. The initiative with the greatest potential is facility optimization. Over the past two years, an outstanding team of colonels from the services' medical departments has crafted an optimization plan to make the MHS as effective as possible.

Essentially, this plan decreases accelerating health-care costs caused by the leakage of care from the direct military healthcare system to the managed-care support contractors. MHS optimization increases the capacity for healthcare delivery within the direct-care system. Increases in healthcare capacity will be created by enhancing provider productivity and availability, and reducing demand for provider services through FHP wellness programs.

Efficient application of FHP processes, with a strong emphasis upon Population Health (PH) care, will decrease beneficiary demands on the MHS. These processes will include population enrollment/assessment; case management; self care; prevention programs; disease management through adherence to evidenced-based medicine; and best practices embodied in clinical practice guidelines. Effective implementation of PH requires deployment of the HEAR II (Health Enrollment, Assessment, and Reporting Tool) information-management system. Planned for deployment in this fiscal year, HEAR II will permit surveying of beneficiaries for health risks and adverse health behaviors and give providers a forecast of demand for treatment and preventive services.

Dr. Sue Bailey, former assistant secretary of defense for health affairs, in her policy letter of March 6, 2000, outlined productivity goals. Each Primary Care Manager (PCM) is to empanel 1,500 patients. This is based on a support staff ratio of 3.5 ancillaries to each PCM and two examination rooms per provider. Facility and personnel shortfalls make this difficult to achieve without infusion of investment capital and significant changes in the business culture of military medical treatment facilities (MTFs).

In October 2000, optimization began in the Northwestern Region (Region 11). The Lead Agent has been given expanded authority to allow for better decisionmaking. Success in Region 11 is of the highest priority and will lead the way in transforming the way that we do business across the MHS.

Information-management systems are key enablers for optimization. We will deploy the Composite Health Care System II (CHCS II) to replace CHCS I. After a prolonged and exhaustive redevelopment process characterized by superlative collaboration between technical and functional experts, CHCS II will provide a legible and readily available computerized patient-record system that will be shared across CHCS hosts. Through it, providers will be linked to laboratory, pharmacy, radiology, and other services. By eliminating duplication of effort in record input, it will facilitate interaction between providers and patients.

Additionally, CHCS II will support best business practices, medical surveillance, and clinical research by permitting rapid data query on individuals and populations, which will supply critical information to providers from treatment rooms to medical department headquarters. CHCS II will be the framework and the heart of cutting-edge health services and will provide impetus for optimization across the MHS.

Finally, emphasis is now being given to the theater of operations to round out fully the optimization effort. Through the Theater Medical Information Program (TMIP), the MHS is integrating its information systems into a single, responsive theater Combat Health Support (CHS) system allowing

continuity of care across the continuum. This links the theater to the sustaining base. By using these common MHS information systems, the AMEDD for the first time will be able to provide standardized training for medical forces to facilitate rapid transitioning from sustaining base/garrison healthcare operations to theater CHS operations.

However, neither optimization nor any other improvement in health services delivery can be accomplished without quality healthcare professionals. Recruiting and retaining quality medical personnel is a major concern of the Army Medical Department leadership. The civilian healthcare industry is very attractive to our mid-term officers, enlisted personnel, and civilians. We need to find new ways to compete with the civilian health care industry, and that is being addressed by a tri-service general-officer review board. We need additional incentives and benefits to attract and retain quality people.

Success in Force Health Protection, modernization, and optimization—and in keeping the people to do them—is vital. They're important issues and have a real impact on human beings. "Force health protection," "modernization" and "optimization" will improve the care we give to soldiers, retirees and their families. Still, those words are couched in the coldblooded lingo of the technician and the management guru. They are not words to warm the heart of a wounded warrior—nor the hearts of many AMEDD people, either.

There is something larger at stake, something deeper and more inspiring. Gen. Shinseki clearly believes this, as he showed in announcing his "Army Well-Being Plan," in which the AMEDD plays a major role. We are fortunate to have a leader who sees the importance of the human heart and human spirit in our Army.

Accordingly, I pledge to the Army family that the AMEDD will not lose sight of the human dimension—the well-being of the Army. While we wrestle with the structural, logistical and financial infrastructure of Army Medicine, we must still focus on how best to take care of people on an individual basis—and we are committed to putting the needs of our patients ahead of all other considerations.

I can guarantee that because I know the kind of people we have—people who are drawn to Army Medicine by the opportunity to help others. We force ourselves to sit at desks and punch computers and suffer through endless PowerPoint briefings. But we live for our contacts with real people who need our help...whether it's a casualty on a bloodstained litter, a desperately ill child lying in an ultramodern operating theater, or a happy mom admiring the ultrasound image of her unborn child.

To help such people live healthier and happier lives; to share with them the joy of survival and recovery; to share with them equally—when need be—the fear, the pain and the grief of illness and death...that is what it means to be a healer.

Our healers have an unquenchable thirst for that kind of emotional engagement with life. For them, caring for others will always be foremost. We will do what we must to make our systems more efficient and effective, but we will never lose track of the reason we do it—to make our beneficiaries' lives better.

SUCCESS IN FORCE HEALTH PROTECTION, MODERNIZATION, AND OPTIMIZATION—AND IN KEEPING THE PEOPLE TO DO THEM—IS VITAL